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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,883	03/18/2004	Yoshinori Yoshida	Q80489	5194
23373	7590	04/18/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			TRAN, THAO T	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/802,883

Applicant(s)

YOSHIDA ET AL.

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This is in response to the Amendments filed on 01/30/2006.
2. Claims 1-21 are currently pending in this application. Claims 1 and 19-20 have been amended. Claim 22 has been newly added.

### ***Claim Rejections - 35 USC § 112***

3. In view of the Office action of 9/28/2005, the rejection of claim 20 under 35 U.S.C. 112, second paragraph, has been withdrawn due to the Amendment made thereto.
4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1 and 19-21 contain the newly added limitation "said cleaning layer having no abrasive" that is considered new matter because it does not have proper support in the specification as originally presented. Although the present specification discloses that the present

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invention is “to provide a cleaning sheet that allows for removal of foreign matter without wearing off a probe needle when the foreign matter adhering on a probe needle of a probe card is removed and without causing re-adhering of the foreign matter that has once been removed from the needle and a transporting member having such a cleaning sheet and its production method” (see paragraph 0007), it does not disclose that there is no abrasive material in the cleaning layer. Moreover, the present specification discloses the use of additives, such as fillers and pigments, which are usually abrasive materials.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites the limitation "the cleaning sheet" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 21 recites the limitations "the cleaning layer" and "the transporting member" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. Claims 1-5, 7-11, 13, 16, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Skinner et al. (US Pat. 4,342,793).

Skinner discloses curing resins comprising a reactive diluent, a polyol, and a polyisocyanate that are cured both by radiation and heat (abstract). Monofunctional reactive diluents include conventional acrylic monomers (col. 5, lines 36-43). The coatings are applied to substrates, thus suggesting backing layers (col. 9, lines 64-68). Since the reactants are the same as those claimed by the applicant and since the coatings are cured by heat and radiation to form interpenetrating networks, it is the examiner's position that the coatings of the invention would possess the claimed initial elastic modulus properties.

In addition, Skinner does not teach the use of abrasive material in the coatings, thus meeting the requirement of the cleaning layer having no abrasive.

Regarding the method, the examples show that the polyurethane, polyols, and acrylate monomers are mixed together, coated, irradiated, and thermally cured (at least example 3). Since the polyol and isocyanate monomers would react upon mixing, the reference teaches the claimed process of reacting the components to form a mixture of a polyurethane and a vinyl monomer, coating the mixture, and irradiating the coating. The final thermal cure serves to fully cure the components. Regarding the "cleaning sheet for removing foreign matter adhering on a tip of a probe needle of a probe card" limitations, it is noted that this is an intended use for the sheet. It is the examiner's position that the coatings of the invention would be capable of wiping debris from a probe needle since it is a solid surface and more specifically because it contains the claimed materials.

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10. Claims 1-2, 5, 7-8, and 11-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Grube (US Pat. 6,817,052).

Grube discloses a cleaning sheet for removing debris from probe tips (see abstract), the cleaning sheet comprising an outer surface layer 302 on roller 204 attached to a support arm 202. The outer surface 302 comprises a combinations of polymeric materials, such as urethane and acrylic (see col. 7, ln. 10-23). The cleaning sheet can be multilayered and adhered to roller 204 by adhesive (see col. 8, ln. 29-41). Grube further discloses that arm 202 supports sticky roller 204 and/or an abrasive roller or other surface (see col. 12, ln. 56-57), indicating that the outer surface 302 of roller 204 may be free of abrasive, thus meeting the requirements of the presently claimed invention.

***Claim Rejections - 35 USC § 103***

11. In view of the Office action of 9/28/2005, the rejections of claims 14-15, 17-18, and 20-21 over Maekawa et al. (US-2002/0190737) in view of Skinner et al; and of claims 6 and 12 over Maekawa et al. in view of Skinner et al. and further in view of Back et al. (US-2003/0027496), have been withdrawn due to the Amendments made thereto.

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3-4, 6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube as applied to claims 1-2, 5, 7-8, and 11-17 above, in view of Skinner et al.

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Grube is as set forth in claims 1-2, 5, 7-8, and 11-17 and incorporated herein.

Grube does not specifically teach the polyurethane being formed from a polyol and a polyisocyanate, or that the polymeric mixture being cured by radiation.

Skinner applies as above, teaching polyurethane coating resins that form improved tough and hard coatings on various substrates (abstract). The coatings are formed essentially free from solvent emission and are fully crosslinked (col. 2 lines 64-68). Thus, it would have been prima facie obvious to use the coatings of Skinner's invention as the binder resins of the Maekawa invention to provide hard, fully crosslinked coatings having improved toughness and solvent emission.

#### ***Response to Arguments***

14. Applicant's arguments filed on 1/30/2006 have been fully considered but they are not persuasive.

Applicants contend Skinner does not disclose that there is no abrasive used in the cleaning material so that the probe is not eroded during the cleaning process. However, since Skinner does not teach the use of any abrasive in the cleaning material, the reference meets the requirements of the presently claimed invention.

15. Applicants' arguments with respect to the rejections of the claims over Maekawa in view of Skinner and over Maekawa in view of Skinner, and further in view of Back are moot due to the withdrawal of the rejections.

***Conclusion***

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

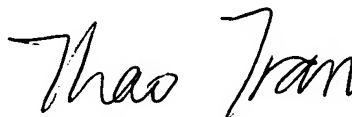
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



tt  
April 17, 2006

**THAO T. TRAN**  
**PATENT EXAMINER**